<table>
<thead>
<tr>
<th>Project Title</th>
<th>Duration</th>
<th>Investigator</th>
<th>Sponsor</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td><strong>3R and Resource Efficiency towards Resilient Cities</strong> and Societies: Implications towards SDG</td>
<td>1 September 2016 – 1 November 2017</td>
<td>Prof. Chettiyappan Visvanathan</td>
<td>The United Nations Centre for Regional Development ( UNCRD)</td>
<td>Baht 325,000</td>
</tr>
<tr>
<td><strong>A Study on Urban Air Pollution Improvement in Asia</strong></td>
<td>31 March 2015 - 31 December 2017</td>
<td>Prof. Nguyen Thi Kim Oanh</td>
<td>Japan International Cooperation Agency (JICA) Thailand Office</td>
<td>Baht 3,044,338.16</td>
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<tr>
<td><strong>Climate Technology Center and Network (CTCN) Response Plan: Feasibility Study For Setting Up a Watch Observatory for Health and Environmental Risks in Pointe Noire, Republic of Congo (Brazzaville)</strong></td>
<td>1 June 2016 - Feburary 2017</td>
<td>Dr. Oleg Shipin</td>
<td>UNEP/CTCN (Copenhagen)</td>
<td>Baht 280,000</td>
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<tr>
<td><strong>Climate Technology Center and Network (CTCN) Technical Assistance Response Plan For Nepal</strong></td>
<td>1 November 16 - 31 December 2017</td>
<td>Dr. P. Abdul Salam</td>
<td>CTCN</td>
<td>Baht 207,000</td>
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<tr>
<td><strong>Development of Water Treatment Equipment for High-rate Sedimentation Filtration System Suitable for Thailand Water Quality Characteristics</strong></td>
<td>1 June 2015 – 30 November 2017</td>
<td>Prof. Chettiyappan Visvanathan</td>
<td>NoxKorea, Co., Korea</td>
<td>Baht 990,000</td>
</tr>
<tr>
<td><strong>Development of the Co-Benefit Action Plan for Bandung City</strong></td>
<td>1 July 2015 – 30 September 2017</td>
<td>Prof. Nguyen Thi Kim Oanh</td>
<td>Institute of Global Environmental Strategies (IGES)</td>
<td>Baht 1,197,495</td>
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<tr>
<td><strong>Development of the Co-Benefit Study in Semarang City</strong></td>
<td>1 July 2016 to 30 September 2017</td>
<td>Prof. Nguyen Thi Kim Oanh</td>
<td>Institute of Global Environmental Strategies (IGES)</td>
<td>Baht 1,217,287.50</td>
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<tr>
<td><strong>Efficiency Improvement of Bangchak Solar Panels</strong></td>
<td>29 February 2016 - 31 March 2017</td>
<td>Prof. Weerakorn Ongsakul</td>
<td>Bangchak Solar Energy Company Limited</td>
<td>Baht 130,625</td>
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<tr>
<td><strong>Energy Environmental Data Analysis for Low Carbon Society (EEDA)</strong></td>
<td>12 January 2009 - 5 January 2017</td>
<td>Prof. Sivanappan Kumar</td>
<td>MHIR Japan</td>
<td>Baht 717,000</td>
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<tr>
<td><strong>Development of Innovative Technology and Integrate Management Systems for Sustainable Sanitation in ASEAN</strong></td>
<td>10 December 2013 – 31 August 2017</td>
<td>Dr. Thammarat Koottatap</td>
<td>KIST-Korea Institute of Science &amp; Technology</td>
<td>Baht 2,420,000</td>
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</tbody>
</table>
Reports in Drinking Water Services and Technologies in Asian countries – Phase II

Duration: 1 April 2016 – 30 September 2017
Investigator: Prof. Chettiyappan Visvanathan
Sponsor: Japan Water Research Center (JWRC)
Amount: Baht 295,728.82

Renewable Energy Technologies (RETs) for Integrated Community Farming Systems

Duration: 1 April 2015 - 8 June 2017
Investigator: Prof. Sivanappan Kumar
Prof. Kyoko Kusakabe
Sponsor: Wisions of Sustainability
Amount: Baht 495,651.60


Duration: 20 December 2016 - 19 December 2017
Investigator: Dr. Oleg Shipin
Sponsor: CTCN-PCA, UNEP
Amount: Baht 210,000

Stimulating Local Innovation on Sanitation for the Urban Poor in Sub-Saharan and Southeast Asia

Duration: 8 February 2012 – 31 December 2017
Investigator: Dr. Thammarat Koottatep
Sponsor: Bill and Melinda Gates Foundation
Amount: Baht 26,124,360

Strengthening Capacity of Policymakers in South-East Asia (SEA) to Promote Policies and Developing Plans for Improved Wastewater Treatment and Reuse in Urban and Peri-Urban Areas

Duration: 1 December 2014 – 30 June 2017
Investigator: Dr. Thammarat Koottatep
Sponsor: United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
Amount: Baht 1,159,308.90

Sustainability Issues Due to Coal Ash from Coal Fired Power Plants

Duration: 1 September 2010 – 31 August 2017
Investigator: Prof. Ajit P. Annachhatre
Sponsor: SDCC/AIT France Network
Amount: Baht 1,440,000

The Greater Mekong Sub Region Academic and Research network (GMSARN)

Duration: 30 June 2012 - June 2017
Investigator: Prof. Weerakorn Ongsakul
Sponsor: Registration Revenues
Amount: Baht 1,400,000

Turning Rice Straw Into Cooking Fuel for Air Quality and Climate Co-benefit in Selected GMS Countries

Duration: 15 December 2014 – 30 September 2017
Investigator: Prof. Nguyen Thi Kim Oanh
Dr. P. Abdul Salam
Sponsor: Stockholm Environment Institute (SEI) Asia Center
Amount: Baht 1,989,500
### Ongoing Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Duration</th>
<th>Investigator</th>
<th>Sponsor</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Community Scale, Decentralized Anaerobic Digestion for Energy and Resource Recovery</td>
<td>1 May 2016 - 31 October 2018</td>
<td>Prof. Chettiyappan Visvanathan Dr. P. Abdul Salam</td>
<td>British Council</td>
<td>Baht 12,430,000</td>
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<tr>
<td>Developing an Operational Framework for River Health Assessment in the Mekong River Basin</td>
<td>1 December 2014 – 1 December 2018</td>
<td>Prof. Mukand S. Babel Dr. Oleg Shipin Dr. Sangam Shrestha Dr. Victor Shinde</td>
<td>Consultative Group on International Agricultural Research (CGIAR)</td>
<td>Baht 12,899,700</td>
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<tr>
<td>Innovative Toilet City: From Reinventing to Realization at Scale</td>
<td>1 September 2016 – 28 February 2019</td>
<td>Dr. Thammarat Koottatep</td>
<td>The Thailand Research Fund (TRF)</td>
<td>Baht 5,044,150</td>
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<tr>
<td>Pea-AIT Scholarship Program</td>
<td>April 2016 - December 2020</td>
<td>Prof. Weerakorn Ongsakul</td>
<td>Provincial Electricity Authority</td>
<td>Baht 20,212,000</td>
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<tr>
<td>Sustainable Decentralized Wastewater Management in Developing Countries</td>
<td>15 October 2011 – 31 March 2018</td>
<td>Dr. Thammarat Koottatep</td>
<td>Bill &amp; Melinda Gates Foundation</td>
<td>Baht 149,991,660</td>
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<tr>
<td>Technology Needs Assessment (Phase II) for Asia and CS Region - Missions</td>
<td>8 January 2015 - 28 February 2018</td>
<td>Prof. Sivanappan Kumar Prof. Rajendra Prasad Shrestha Dr. P. Abdul Salam</td>
<td>UNEP-DTU Partnership, Denmark</td>
<td>Baht 320,000</td>
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<tr>
<td>Technology Needs Assessment (Phase II) for Asia and CS Region - Technical</td>
<td>8 January 2015 - 28 February 2018</td>
<td>Prof. Sivanappan Kumar Prof. Rajendra Prasad Shrestha Dr. P. Abdul Salam</td>
<td>UNEP-DTU Partnership, Denmark</td>
<td>Baht 2,514,000</td>
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<tr>
<td>Technology Needs Assessment (Phase II) for Asia and CS Region - Workshop</td>
<td>8 January 2015 - 28 February 2018</td>
<td>Prof. Sivanappan Kumar Prof. Rajendra Prasad Shrestha Dr. P. Abdul Salam</td>
<td>UNEP-DTU Partnership, Denmark</td>
<td>Baht 1,744,000</td>
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<tr>
<td>Toward an Open Resources Upon Services: Cloud Computing of Environmental Data TORUS</td>
<td>15 October 2015 – 14 October 2018</td>
<td>Prof. Nguyen Thi Kim Oanh</td>
<td>European Union (Erasmus + Capacity Building)</td>
<td>Baht 1,814,296</td>
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Initiated Projects

**AIT BORDA Collaboration**

Duration: 1 January 2017 - 30 December 2019  
Investigator: Dr. Thammarat Koottatep  
Sponsor: Beremen Overseas Research Association  
Amount: Baht 5,550,000

**Assessment of Dioxin Emissions from Point Sources in Thailand**

Duration: 1 November 2017 – 30 June 2018  
Investigator: Prof. Nguyen Thi Kim Oanh, Dr. Ekbordin Winijkul  
Sponsor: Integrated Consultancy on Infrastructure Development and Environmental Conservation (IDEA Consultants, Inc.)  
Amount: Baht 865,500

**Biogeochemical Changes and Adaptation Mechanisms in response to Anthrpogenic Impacts in Watersheds: A Comparative Study between Jiulong River and Chao Praya River (Thailand)**

Duration: 13 July 2017 - 12 June 2018  
Investigator: Dr. Thammarat Kottatap, Prof. Rajendra Prasad Shrestha  
Sponsor: National Research Council of Thailand (NRCT)  
Amount: Baht 1,454,000

**Creating Wider Impacts of Rice Straw Derived Fuel Use as Cooking**

Duration: 1 July 2017 – 31 January 2018  
Investigator: Prof. Nguyen Thi Kim Oanh  
Sponsor: Stockholm Environment Institute (SEI) Asia Centre  
Amount: Baht 195,000

**Current and Future Primary Particle Number Size Distribution Emission Inventory of On-road Vehicles in Southeast Asia**

Duration: 1 May 2017 – 31 October 2017  
Investigator: Dr. Ekbordin Winijkul  
Sponsor: AIT Research Initiation Grant  
Amount: Baht 50,000

**Develop a Comprehensive Background Paper on “Water Quality and Security in Asia-Pacific - What 3R and Circular Economy Can Offer?” and Substantive input to Eighth Regional 3R Forum in Asia and the Pacific**

Duration: 1 August 2017 - 31 July 2018  
Investigator: Prof. Chettiyappan Visvanathan  
Sponsor: United Nations (UN)  
Amount: Baht 465,000

**Development of a Thermophilic Anaerobic Membrane Bioreactor by Using PTFE Membrane for Wastewater Treatment and Biogas Production**

Duration: 1 October 2017 - 30 September 2018  
Investigator: Prof. Chettiyappan Visvanathan  
Sponsor: Sumitomo Electric Industries, Ltd., Japan  
Amount: Baht 225,000

**Establishment of Fecal Sludge Management Twining Program**

Duration: 7 September 2017 - 31 December 2018  
Investigator: Dr. Thammarat Koottatep  
Sponsor: Bill and Melinda Gates Foundation  
Amount: Baht 29,975,970.61

**Evaluating the Performance of Mitsubishi Membrane Aerated Biofilm Reactor (MABR) Lab Scale Membrane Modules**

Duration: 1 June 2017 – 31 May 2018  
Investigator: Prof. Chettiyappan Visvanathan  
Sponsor: Mitsubishi Chemical Aqua Solutions Co., Ltd.  
Amount: Baht 148,185

**Evidence to Action Supplement on PEER project entitled “Assessment of Impacts to the Emission Reduction Measures of Short-lived Climate Forcing Pollutants on Air Quality and Climate in Southeast Asia”**

Duration: 1 September 2017 - 30 May 2018  
Investigator: Prof. Nguyen Thi Kim Oanh  
Sponsor: United States Agency for International Development (USAID/National Academy of Sciences (NAS)  
Amount: Baht 837,750
Exposure visit FSM in Thailand
Duration: 24 October 2017 – 30 April 2018
Investigator: Dr. Thammarat Koottatep
Sponsor: East Meets West Foundation
Amount: Baht 139,179

Foundations for Climate Resilient and Sustainable Growing Settlements (U-Res)
Duration: 1 March 2017 - 30 August 2017
Investigator: Dr. Shobhakar Dhakal
Sponsor: NERC/Tyndall Center
Amount: Baht 443,020

Global Science Technology and Innovation Conference Series
Duration: 1 May 2017 - 31 December 2017
Investigator: Prof. Sivanappan Kumar
Prof. Rajendra Prasad Shrestha
Dr. P. Abdul Salam
Sponsor: VITONV Belgium
Amount: Baht 383,400

International Forum on Education for Rural Transformation
Duration: 1 July - 31 December 2017
Investigator: Prof. Sivanappan Kumar
Dr. Mokbul Morshed Ahmad
Sponsor: ASEAN China Corporation Fund
Amount: Baht 7,160,400

Knowledge and Innovation Support for ADB's Water Financing Program
Duration: 17 July 2017 - 29 June 2018
Investigator: Dr. Thammarat Koottatep
Sponsor: Asian Development Bank (ADB)
Amount: Baht 2,038,634

Optimizing Decentralised Low-cost Wastewater Infrastructure by Managing the Microbes
Duration: 1 May 2017 - 30 April 2020
Investigator: Dr. Thammarat Koottatep
Sponsor: Engineering and Physical Sciences Research Council (EPSRC GCRF)
Amount: Baht 12,616,798.50

Reports on Drinking Water Services and Technologies in Asian Countries - Phase III
Duration: 1 April 2017 - 30 September 2018
Investigator: Prof. Chetthiyappan Visvanathan
Sponsor: Japan Water Research Center (JWRC)
Amount: Baht 179,000

Short Term Actions 2017, BMGF project 106990
Duration: 22 November 2017 – 31 December 2018
Investigator: Dr. Thammarat Koottatep
Sponsor: Subgrant from UNESCO IHE - BMGF Grant
Amount: Baht 954,093.66

Solar Power Plugged in Hybrid Electric Vehicle
Duration: 31 August 2017 - 31 December 2018
Investigator: Prof. Weerakorn Ongsakul
Sponsor: GMS Power Public Company Limited
Amount: Baht 1,000,000

Standard Methods for the Analysis of Faecal Sludge
Duration: 30 June 2017 – 31 August 2018
Investigator: Dr. Thammarat Koottatep
Sponsor: University of KwaZulu-Natal (UKZN) - BMGF Grant
Amount: Baht 1,454,000

Technical Assistance for Technology transfer and commercialization support of the AIT Toilet Innovations
Duration: 7 November 2017 – 30 April 2019
Investigator: Dr. Thammarat Koottatep
Sponsor: Bill and Melinda Gates Foundation
Amount: Baht 51,283,398.95

Test the Efficacy of Electrochemical (EC) Control System
Duration: 1 April 2017 - 30 November 2017
Investigator: Dr. Thammarat Koottatep
Sponsor: Research Triangle Institute (RTI)
Amount: Baht 1,654,000